

XEROX

The 1100 Scientific Information Processor Fact Sheet

A Personal Interlisp Environment

The Xerox 1100 Scientific Information Processor is a microprogrammed medium sized computer. The system consists of two modules: a work station and an electronic cabinet.



The work station uses a large format display, a keyboard and a pointing device called a "mouse". The electronics cabinet is small enough to be used in an office environment or it may be located remotely.

The 1100 Scientific Information Processor includes a complete implementation of the Interlisp Virtual Machine (VM) specification. All system software documented in the Interlisp Reference Manual (with the exception of those portions described as applicable to Interlisp-10 only) runs under the 1100 Processor Interlisp. Several very large and independently developed application systems, including the Mycin System for Infectious Disease Diagnosis, the KL-ONE Knowledge Representation Language, and the West Tutoring System, have been implemented on the 1100 Scientific Information Processor. The 1100 system delivers computing power comparable to that delivered by a KL-10 with a load average of approximately 1.5 when running large Interlisp AI systems, such as KL-ONE. The 1100 is currently in active use by researchers at Xerox Palo Alto Research Center and Stanford University.

The 1100 system is written almost entirely in **LISP**. All of this code is accessible, which allows a systems-oriented user to provide a wide variety of non-standard features.

FACT SHEET

DETAILED INFORMATION

Processor

4 M words (8 M bytes) virtual address space
576 K words (1.15M bytes) main memory
~ 200 nsec micro instruction cycle time
Rigid disk Shugart SA 4008, formatted capacity
23 M bytes
RS232C interfaces
I/O interface consisting of:
-- 8 output lines, 5 input lines
-- 8 bidirectional tristate lines
Communications interface

Display

Large format CRT display (17" diagonal)
High resolution bit map (1024 x 808 pixels)
Usable viewing area: 12.75" wide x 10" high
Refresh rate: 38.7 frames per second, interlaced
Distance from processor: up to 250 feet

Keyboard

64 unencoded keys

Pointing Device

3-button mouse

Software

Interlisp D:
-- Direct microcode support
-- Deep binding
-- CDR encoding (in a 32-bit CONS cell)
-- Incremental, reference counted garbage
collections
-- Raster scan graphics
-- Communications software

Communications

Controller, transceiver, and cable connector
will be supplied

Size

Processor
19" wide x 23" high x 28" deep
Display Unit
17" wide x 19" high x 15" deep
Keyboard
17" wide x 3.25" high x 7" deep
Pointing Device
2" wide x 1.5" high x 3.25" deep

Weight

Processor: 150 pounds
Display Unit: 40 pounds
Keyboard: 6 pounds

Power

Processor
115 V, 60 Hz, 12 amps
Display Unit
Included in processor rating

PRICE

For Processor, Display, Keyboard, Pointing
Device, and license for use of Interlisp D
Software **\$59,719 per system**